

# Triodia pisolitica

## Name

*Triodia pisolitica* Trudgen & M.D.Barrett, *ined.*

## Citation

*Nuytsia*, in press, (2017).

## Derivation

*pisolitica* — from pisolite, a geological term for a conglomerate of pea-sized pieces such as gravel (in turn derived from Latin *pisum*, pea), and Latin *-cola*, dweller, in reference to its common occurrence on pisolite mesas.

## Common name

Mesa Spinifex

## Synonyms

*Triodia* sp. Robe River (M.E. Trudgen *et al.* MET 12367)

## Diagnostic features

Foliage non-resinous; leaf sheath surfaces glabrous or hairy; leaf blades epistomatous (soft-type), 24–59 cm long and lax; spikelets with 0–2 reduced infertile florets at the apex; lower glume narrowly lanceolate, 3–5-nerved; lemmas awned; lowest lemma midlobe 4.2–9 mm long; palea glabrous; distribution in west Pilbara.

## Habitat

Occurs on ironstone mesas, slopes and gullies, or sometimes on flat loam.

## Distribution and frequency

Endemic to the west Pilbara, most abundant from Cane River to Pannawonica but with a few localized occurrences outside this area.

## Similar species

*Triodia pisolitica* belongs to the Soft group, sharing the epistomatous (soft-type) leaf blades. All other Pilbara species with epistomatous (soft-type) leaf blades and distinctly awned (not lobed or very shortly-awned) lemmas either have resinous foliage (always non-resinous in *T. pisolitica*) or bitextured lemmas (uniformly textured at maturity in *T. pisolitica*).

*Triodia pisolitica* is similar to *T. melvillei* but has non-resinous, lax and usually drooping leaves 24–59 cm long [15–35(–46) mm long in *T. melvillei*], 0–2 reduced infertile florets terminating spikelets (3–4 reduced infertile florets at the apex of spikelets in *T. melvillei*), and occurs in the west Pilbara, disjunct from the distribution of *T. melvillei*.

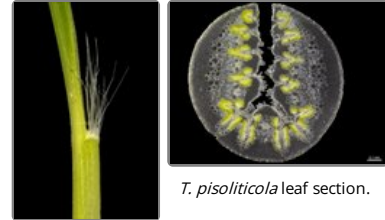
The closest genetic relative of *T. pisolitica* is *T. karijini*, which shares the narrowly lanceolate glumes and non-resinous, epistomatous leaves, but occurs disjunctly in the eastern Hamersley Range. *Triodia karijini* differs from *T. pisolitica* in having narrowly triangular to sub-awned lemma lobes 2–3 mm long (distinctly awned and 4.2–9 mm long in *T. pisolitica*) and generally shorter leaves 19–34 cm long (24–59 cm long in *T. pisolitica*).

*Triodia avenoides*, *T. basitricha*, *T. degreyensis*, *T. schinzii*, and *T. sp.* Mt Ella all have bitextured lemmas (uniformly textured in *T. pisolitica*) and hairs uniformly distributed over the surface of the lemma (where present in longitudinal rows in *T. pisolitica*).



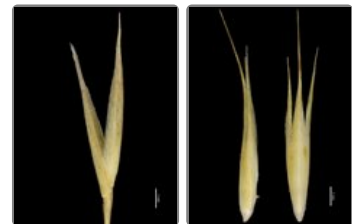
*T. pisolitica* habitat.

*T. pisolitica* spikelet.

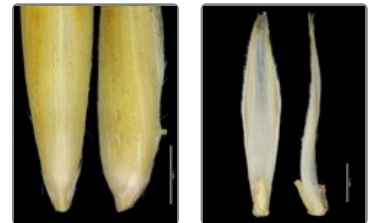


*T. pisolitica* leaf section.

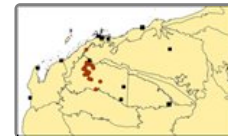
*T. pisolitica* orifice.



*T. pisolitica* glumes. *T. pisolitica* lemmas.



*T. pisolitica* lemma bases. *T. pisolitica* paleas.



*T. pisolitica* map.

*T. veniciae* has resinous foliage (non-resinous in *T. pisolitica*), lemma lobes narrowly acute to sub-awned (distinctly awned in *T. pisolitica*), and occurs in the Chichester sub-region (Hamersley, Gascoyne or Little Sandy Desert regions for *T. melvillei*).

### Conservation status

Priority Three.

### Identification without florets

The epistomatous (soft-type) leaves, non-resinous foliage and west Pilbara distribution is a combination shared only with *Triodia basitricha*, which also shares the narrowly lanceolate glumes. The two species differ in leaf blade length (24–59 cm long in *T. pisolitica*, 13–25 cm long in *T. basitricha*).

### Variation

Leaf sheaths can be hairy or glabrous on surfaces.

### Notes

*Triodia pisolitica* was included under a broad concept of *T. melvillei* by Lazarides (1997), Lazarides *et al.* (2005) and *Ausgrass* (Sharp & Simon, 2002; Simon & Alonso, 2014), but was noted as a non-resinous variant.

A full description of *T. pisolitica* can be found in Barrett & Trudgen (2017b).